



OCS Environmental, Inc.

U.S. Steel Gary Works Emissions Inspection Summary

Date: 1/16/12Start Time: 09:30 (AM) PMEnd Time: 10:29 (AM) PM

No. 2 Precarbon ESP

BOP Roof Monitor Gas Cleaners

QBOP Roof Monitor Gas Cleaners

| | | | | |
|---------------|---|---|---|----|
| Blast Furnace | 4 | 6 | 8 | 14 |
|---------------|---|---|---|----|

| | | | | |
|-------------------|---|---|---|----|
| Blast Furnace Top | 4 | 6 | 8 | 14 |
|-------------------|---|---|---|----|

The following events or operations contributed to significant emissions:

| Time | Heat/Cast Number | Operation | Comments |
|---|------------------|---|--|
| 10:19 ¹⁵ - 10:25 ²³ | 65 | OPENED HOLE 10:19 creating EXCESS EMISSIONS | TOTAL 500 Avg 20.83 Black (Shell) High 40.8% |
| | | | |
| | | | |
| | | | |
| | | | |



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 1 of 3

Date: 1-6-12
 Source: 14B FCE
 Observation Start Time: 09:30
 Observation End Time: 09:59
 Observer's Position: 14B F4
 Distance to source: 800 YDS
 Direction to source: N
338°
 Height of source: 121'
 Vertical angle to source: 3°

| | Start | End |
|---------------------|-----------------|-------------|
| Emissions color: | <u>AS NOTED</u> | <u>SAME</u> |
| Background: | <u>SLY</u> | |
| Sky Conditions: | <u>Cloudy</u> | |
| Wind Speed: | <u>6</u> | |
| Wind Direction: | <u>SW</u> | |
| Ambient Temp: | <u>48°</u> | |
| Relative Humidity%: | <u>66%</u> | |
| Wet Bulb Temp: | | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|----------|---|----|----|----|----|----|---|----|----|----|----------|
| | | | | | 0 | 30 | 0 | 0 | 0 | 0 | |
| | | | | | 1 | 31 | 0 | 0 | 0 | 0 | |
| | | | | | 2 | 32 | 0 | 0 | 0 | 0 | |
| | | | | | 3 | 33 | 0 | 0 | 0 | 0 | |
| | | | | | 4 | 34 | 0 | 0 | 0 | 0 | |
| | | | | | 5 | 35 | 0 | 0 | 0 | 0 | |
| | | | | | 6 | 36 | 0 | 0 | 0 | 0 | |
| | | | | | 7 | 37 | 0 | 0 | 0 | 0 | |
| | | | | | 8 | 38 | 0 | 0 | 0 | 0 | |
| | | | | | 9 | 39 | 0 | 0 | 0 | 0 | |
| | | | | | 10 | 40 | 0 | 0 | 0 | 0 | |
| | | | | | 11 | 41 | 0 | 0 | 0 | 0 | |
| | | | | | 12 | 42 | 0 | 0 | 0 | 0 | |
| | | | | | 13 | 43 | 0 | 0 | 0 | 0 | |
| | | | | | 14 | 44 | 0 | 0 | 0 | 0 | |
| | | | | | 15 | 45 | 0 | 0 | 0 | 0 | |
| | | | | | 16 | 46 | 0 | 0 | 0 | 0 | |
| | | | | | 17 | 47 | 0 | 0 | 0 | 0 | |
| | | | | | 18 | 48 | 0 | 0 | 0 | 0 | |
| | | | | | 19 | 49 | 0 | 0 | 0 | 0 | |
| | | | | | 20 | 50 | 0 | 0 | 0 | 0 | |
| | | | | | 21 | 51 | 0 | 0 | 0 | 0 | |
| | | | | | 22 | 52 | 0 | 0 | 0 | 0 | |
| | | | | | 23 | 53 | 0 | 0 | 0 | 0 | |
| | | | | | 24 | 54 | 0 | 0 | 0 | 0 | |
| | | | | | 25 | 55 | 0 | 0 | 0 | 0 | |
| | | | | | 26 | 56 | 0 | 0 | 0 | 0 | |
| | | | | | 27 | 57 | 0 | 0 | 0 | 0 | |
| | | | | | 28 | 58 | 0 | 0 | 0 | 0 | |
| | | | | | 29 | 59 | 0 | 0 | 0 | 0 | |

Additional Info (Include steam dissipation point)

Observer's Signature

C. Quinn



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 2 of 3

Date: 1-6-12
 Source: 148 FCE
 Observation Start Time: 10:00
 Observation End Time: 10:59
 Observer's Position: 148 F4
 Distance to source: 800 YDS
 Direction to source: N
338'
 Height of source: 121'
 Vertical angle to source: 3°

Emissions color:

Background:

Sky Conditions:

Wind Speed:

Wind Direction:

Ambient Temp:

Relative Humidity%:

Wet Bulb Temp:

| Start | End |
|-----------------|--------------|
| <u>AS NOTED</u> | <u>Clear</u> |
| <u>SKY</u> | |
| <u>Cloudy</u> | |
| <u>6</u> | |
| <u>SW</u> | |
| <u>48°</u> | |
| <u>66°</u> | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|-----------|----|----|----|----|----|----|---|----|----|----|----------|
| | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 1 | 31 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 2 | 32 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 3 | 33 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 4 | 34 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 5 | 35 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 6 | 36 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 7 | 37 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 8 | 38 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 9 | 39 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 10 | 40 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 11 | 41 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 12 | 42 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 13 | 43 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 14 | 44 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 15 | 45 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 16 | 46 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 17 | 47 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 18 | 48 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 19 | 49 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 20 | 50 | 0 | 0 | 0 | 0 | |
| Blank 140 | 40 | 40 | 30 | 30 | 21 | 51 | 0 | 0 | 0 | 0 | |
| " 80 | 20 | 20 | 20 | 20 | 22 | 52 | 0 | 0 | 0 | 0 | |
| " 80 | 20 | 20 | 20 | 20 | 23 | 53 | 0 | 0 | 0 | 0 | |
| " 160 | 40 | 40 | 40 | 40 | 24 | 54 | 0 | 0 | 0 | 0 | |
| " 55 | 40 | 15 | 0 | 0 | 25 | 55 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 26 | 56 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 27 | 57 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 28 | 58 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 29 | 59 | 0 | 0 | 0 | 0 | |

Additional Info (Include steam dissipation point)

515

Observer's Signature

C. Dielen



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 3 of 3

Date: 1-6-12
 Source: 14BFCE
 Observation Start Time: 11:00
 Observation End Time: 11:29
 Observer's Position: 14BFH
 Distance to source: 800 YDS
 Direction to source: N
338°
 Height of source: 121'
 Vertical angle to source: 30°

| | Start | End |
|---------------------|-----------------|-------------------------------------|
| Emissions color: | <u>AS NOTED</u> | <u>Same</u> |
| Background: | <u>SKY</u> | |
| Sky Conditions: | <u>Cloudy</u> | |
| Wind Speed: | <u>12</u> | |
| Wind Direction: | <u>SW</u> | |
| Ambient Temp: | <u>48°</u> | |
| Relative Humidity%: | <u>66%</u> | <input checked="" type="checkbox"/> |
| Wet Bulb Temp: | | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|----------|---|----|----|----|----|----|---|----|----|----|----------|
| | 0 | 0 | 0 | 0 | 0 | 30 | | | | | |
| | 0 | 0 | 0 | 0 | 1 | 31 | | | | | |
| | 0 | 0 | 0 | 0 | 2 | 32 | | | | | |
| | 0 | 0 | 0 | 0 | 3 | 33 | | | | | |
| | 0 | 0 | 0 | 0 | 4 | 34 | | | | | |
| | 0 | 0 | 0 | 0 | 5 | 35 | | | | | |
| | 0 | 0 | 0 | 0 | 6 | 36 | | | | | |
| | 0 | 0 | 0 | 0 | 7 | 37 | | | | | |
| | 0 | 0 | 0 | 0 | 8 | 38 | | | | | |
| | 0 | 0 | 0 | 0 | 9 | 39 | | | | | |
| | 0 | 0 | 0 | 0 | 10 | 40 | | | | | |
| | 0 | 0 | 0 | 0 | 11 | 41 | | | | | |
| | 0 | 0 | 0 | 0 | 12 | 42 | | | | | |
| | 0 | 0 | 0 | 0 | 13 | 43 | | | | | |
| | 0 | 0 | 0 | 0 | 14 | 44 | | | | | |
| | 0 | 0 | 0 | 0 | 15 | 45 | | | | | |
| | 0 | 0 | 0 | 0 | 16 | 46 | | | | | |
| | 0 | 0 | 0 | 0 | 17 | 47 | | | | | |
| | 0 | 0 | 0 | 0 | 18 | 48 | | | | | |
| | 0 | 0 | 0 | 0 | 19 | 49 | | | | | |
| | 0 | 0 | 0 | 0 | 20 | 50 | | | | | |
| | 0 | 0 | 0 | 0 | 21 | 51 | | | | | |
| | 0 | 0 | 0 | 0 | 22 | 52 | | | | | |
| | 0 | 0 | 0 | 0 | 23 | 53 | | | | | |
| | 0 | 0 | 0 | 0 | 24 | 54 | | | | | |
| | 0 | 0 | 0 | 0 | 25 | 55 | | | | | |
| | 0 | 0 | 0 | 0 | 26 | 56 | | | | | |
| | 0 | 0 | 0 | 0 | 27 | 57 | | | | | |
| | 0 | 0 | 0 | 0 | 28 | 58 | | | | | |
| | 0 | 0 | 12 | 0 | 29 | 59 | | | | | |

Additional Info (Include steam dissipation point)

Observer's Signature

C. Dahi



OCS Environmental, Inc.
Method 9 Source Layout Sketch

Date: 1/16/12

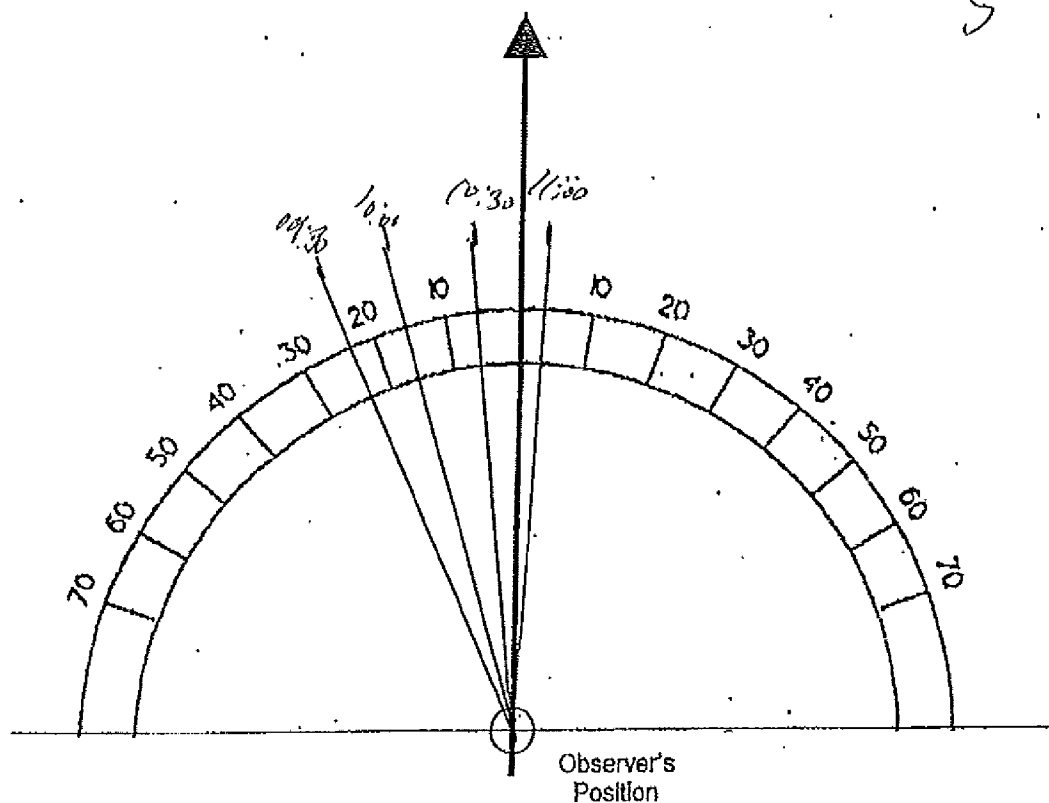
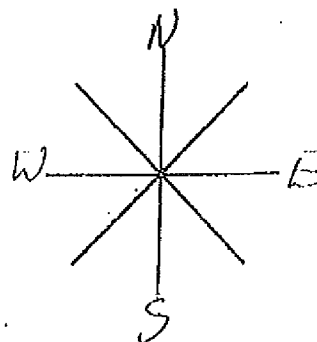
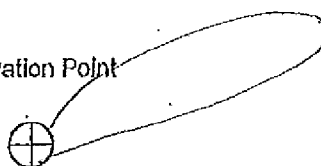
Observer Name: C. Durkin

Begin Time: 09:30

Time End: 11:29

No Sun Visible Times

Observation Point



Signature: C. Durkin

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

GW-Primary00151**Incident**

| | | | |
|-------------------------------|---|---------------------------------|------------------------|
| Short Description: | Verif - No. 2 QBOP Roof Monitor | | |
| Type: | Air Requirement | Status: | Open |
| Reported By: | Jim Alexander | Phone: | 712.7255 |
| Date Received: | 3/19/2012 2:30 PM | USS / Transtar Employee? | Yes |
| Entered By: | Mayella Reyes | | |
| Date Occurred: | 3/19/2012 2:56 AM | End Date: | 3/19/2012 2:59 PM |
| | | Offsite? | No |
| Incident State: | Ended | | |
| Process Unit: | Q-BOP - North | Location: | No. 2QBOP Roof Monitor |
| Description: | (1) exceedance of the PM10 limit observed on No. 2QBOP Roof Monitor. Average opacity reading of 35% from 14:56 - 14:59. | | |
| Environmental Contact: | Mardanna Soto | Method of Contact: | Direct Contact |
| Date Contacted: | 3/19/2012 4:30 PM | CPAR Required? | |
| | | CPAR #: | |

Additional Information

| | | | |
|---|-------------------------|-----------------------------|-------|
| Media: | Air | Severity: | High |
| Has the Initial report been confirmed? | Yes | Confirmation Method: | Field |
| Were changes to the Initial report required? | No | Outside Impact? | No |
| Reportable? | Yes - Agency Reportable | Deviation (Y/N): | Yes |
| Permit/Citation Ref/Plan Associated: | | | |

Additional Comments: This is the second PM-10 recorded. There was also another PM-10 and an internal due to the same issue. Total duration was 9 minutes. The smoke was a result of turning the furnace down to charge side to wait for a ladle to be placed on the car. The scheduled tap time was 15:15 however due to the single crane operation (1 charge was down for PM'S) the melters are told to charge as soon as the metal is available. The Melter contacted the pit foreman and asked if he would have a ladle ready early which would allow him to charge. The pit foreman said he would, and the furnace was charged. The ladle was not available when the blow was complete so the furnace was turned down, as they were turning down slag came over the lip at 80 degrees and they stopped for fear of spilling material in the pit and causing smoke in the shop. However, per procedure, they had to stay on rotation nitrogen (13,000 scfm) to keep the tuyeres clear, but they were out from under the primary hood, and the PM 10 system was on Y because they had already charged scrap. As soon as the ladle was ready the furnace was brought over to tap and the smoke stopped.

Root Cause Determination: The root cause of the incident was the fact that the ladle was late to the car. This was due to #5 ladle crane operator leaving his crane while the ladle for W furnace was being processed. The crane operator was located by the pit foreman and told to return to his crane immediately. He then moved the ladle for use by W furnace.

| | | | |
|--|-------------|------------------------------------|--------------|
| Associated with another incident? | Yes | Associated Incident Number? | Primary00150 |
| Health and Safety? | No | | |
| Incident Classification: | Observation | Category: | |
| Initiating Event: | | | |
| Include in Rates and Counts? | Yes | | |

Jun 13, 2012

1 of 3

11:45:38 AM

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

Incident Detail

| | | |
|---|---|--|
| Incident Sub-Type: | Self Observed Event | Type of air requirement: Title V Permit |
| Type of deviation/exceedance/regulation: | Internal Monitoring | # COMS or # CEMS: |
| Cause: | The root cause of the incident was the fact that the ladle was late to the car. This was due to #5 ladle crane operator leaving his crane while the ladle for W furnace was being processed. The crane operator was located by the pit foreman and told to return to his crane immediately. He then moved the ladle for use by W furnaco. | |
| Control & Counter Measure: | Refer to CA and PA sections. | |

Materials

No Data

Regulatory Notifications

No Data

Incident Investigation List

No Data

Incident Investigation Detail

No Data

Corrective Actions List

| Corrective Action | Status |
|---------------------|-----------|
| P- craneman contact | Completed |

Corrective Actions Detail**Corrective Action: P- craneman contact**

Author: LASH, JAMES
Author Date: 3/19/2012
CAI #:
Notes:
Manager: 11969
Status: Completed
Priority:
Origin Cause:

Proposed Corrective Action: Contact craneman to ensure that they do not block an in-process ladle when craneman must deboard crane for any reason.

Proposed Completion Date: 3/21/2012

Revised Completion Date:

Site Response:

Assigned To:

Externally Controlled:

Review on Completion:

Actual Corrective Action:

Actual Completion Date: Mar 20, 2012 12:00:00 AM

Verified By:

Date Verified:

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

Root Cause

No Data

Reviewers/Approvers

No Data

Attachments

No Data

Witness Statements

No Data

Tasks

No Data

Lessons Learned

No Data



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 2 of 3

Date: 3-19-12
Source: Q-ROOF
Observation Start Time: 1400
Observation End Time: 1459 45
Observer's Position: SP-6
Distance to source: 225 YDS
Direction to source: NW
Height of source: 186
Vertical angle to source: 13°

Emissions color: AS NOTED
Background: SKY
Sky Conditions: GRAY
Wind Speed: 6
Wind Direction: S
Ambient Temp: 66°
Relative Humidity%: 80%
Wet Bulb Temp:

Plume Type: (Attached) Detached None

RUN # 2 HEAT # 2

| Comments | 0 | 15 | 30 | 45 | | 0 | 15 | 30 | 45 | Comments |
|---------------------|---|----|----|----|----|----|----|----|----|---------------------------|
| <u>RUN 2 HEAT 2</u> | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 1 | 31 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 2 | 32 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 3 | 33 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 4 | 34 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 5 | 35 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 6 | 36 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 7 | 37 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 8 | 38 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 9 | 39 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 10 | 40 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 11 | 41 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 12 | 42 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 13 | 43 | 0 | 0 | 0 | <u>END HEAT 2 RUN 2</u> |
| | 0 | 0 | 0 | 0 | 14 | 44 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 15 | 45 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 16 | 46 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 17 | 47 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 18 | 48 | 0 | 0 | 0 | <u>BEGIN HEAT 3 RUN 2</u> |
| | 0 | 0 | 0 | 0 | 19 | 49 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 20 | 50 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 21 | 51 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 22 | 52 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 23 | 53 | 0 | 0 | 0 | <u>W44033</u> |
| | 0 | 0 | 0 | 0 | 24 | 54 | 10 | 10 | 10 | |
| | 0 | 0 | 0 | 0 | 25 | 55 | 10 | 30 | 30 | <u>RED</u> |
| | 0 | 0 | 0 | 0 | 26 | 56 | 30 | 40 | 40 | |
| | 0 | 0 | 0 | 0 | 27 | 57 | 30 | 30 | 40 | |
| | 0 | 0 | 0 | 0 | 28 | 58 | 30 | 30 | 20 | |
| | 0 | 0 | 0 | 0 | 29 | 59 | 30 | 40 | 80 | |

Additional info (include steam dissipation point)

Observer's Signature

J. Johnson



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 1 of 3

Date: 3-19-12
 Source: Q-ROOF
 Observation Start Time: 1309⁰⁰
 Observation End Time: 1359⁴⁵
 Observer's Position: SP-6
 Distance to source: 225 yds
 Direction to source: NW
 Height of source: 186'
 Vertical angle to source: 13°

Emissions color: AS NOTED
 Background: SKY
 Sky Conditions: GRAY
 Wind Speed: 6
 Wind Direction: S
 Ambient Temp: 66°
 Relative Humidity%: 80%
 Wet Bulb Temp: _____

| Start | End |
|----------|------|
| AS NOTED | SAME |
| SKY | |
| GRAY | |
| 6 | |
| S | |
| 66° | |
| 80% | |
| | |

Plume Type: Attached Detached None

RUN # 2 HEAT # 1

| Comments | 0 | 15 | 30 | 45 | | 0 | 15 | 30 | 45 | Comments |
|----------|---|----|----|----|----|----|----|----|----|---------------|
| | | | | | 0 | 30 | 0 | 0 | 0 | |
| | | | | | 1 | 31 | 0 | 0 | 0 | |
| | | | | | 2 | 32 | 0 | 0 | 0 | |
| | | | | | 3 | 33 | 0 | 0 | 0 | |
| | | | | | 4 | 34 | 0 | 0 | 0 | |
| | | | | | 5 | 35 | 0 | 0 | 0 | |
| | | | | | 6 | 36 | 0 | 0 | 0 | |
| | | | | | 7 | 37 | 0 | 0 | 0 | |
| | | | | | 8 | 38 | 0 | 0 | 0 | |
| | | | | | 9 | 39 | 0 | 0 | 0 | |
| | | | | | 10 | 40 | 0 | 0 | 0 | |
| | | | | | 11 | 41 | 0 | 0 | 0 | |
| | | | | | 12 | 42 | 0 | 0 | 0 | |
| | | | | | 13 | 43 | 0 | 0 | 0 | |
| | | | | | 14 | 44 | 0 | 0 | 0 | |
| | | | | | 15 | 45 | 0 | 0 | 0 | |
| | | | | | 16 | 46 | 0 | 0 | 0 | |
| | | | | | 17 | 47 | 0 | 0 | 0 | |
| | | | | | 18 | 48 | 0 | 0 | 0 | |
| | | | | | 19 | 49 | 0 | 0 | 0 | |
| | | | | | 20 | 50 | 0 | 0 | 0 | |
| | | | | | 21 | 51 | 0 | 0 | 0 | |
| | | | | | 22 | 52 | 0 | 0 | 0 | |
| | | | | | 23 | 53 | 0 | 0 | 0 | |
| | | | | | 24 | 54 | 0 | 0 | 0 | |
| | | | | | 25 | 55 | 0 | 0 | 0 | |
| | | | | | 26 | 56 | 0 | 0 | 0 | |
| | | | | | 27 | 57 | 0 | 0 | 0 | |
| | | | | | 28 | 58 | 0 | 0 | 0 | END HEAT 1 |
| | | | | | 29 | 59 | 0 | 0 | 0 | BEGIN HEAT #2 |

Additional info (include steam dissipation point)

Observer's Signature

J. Johnson



OCS Environmental, Inc.
Method 9-VE Inspection Form

Page 3 of 3

Date: 3-19-12
 Source: Q-ROOF
 Observation Start Time: 1500⁰⁰
 Observation End Time: 1530⁰⁰
 Observer's Position: SP-6
 Distance to source: 225 YDS
 Direction to source: NW
 Height of source: 186'
 Vertical angle to source: 13°

| | Start | End |
|---------------------|-----------------|-------------|
| Emissions color: | <u>AS NOTED</u> | <u>SAME</u> |
| Background: | <u>SKY</u> | |
| Sky Conditions: | <u>ERRY</u> | |
| Wind Speed: | <u>6</u> | |
| Wind Direction: | <u>S</u> | |
| Ambient Temp: | <u>68°</u> | |
| Relative Humidity%: | <u>80%</u> | |
| Wet Bulb Temp: | | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|---|----|----|----|---------------|
| <u>RED</u> | <u>60</u> | <u>20</u> | <u>20</u> | <u>10</u> | <u>0</u> | <u>30</u> | | | | | <u>CONT'D</u> |
| | <u>10</u> | <u>10</u> | <u>0</u> | <u>0</u> | <u>1</u> | <u>31</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>2</u> | <u>32</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>3</u> | <u>33</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>4</u> | <u>34</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>5</u> | <u>35</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>6</u> | <u>36</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>7</u> | <u>37</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>8</u> | <u>38</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>9</u> | <u>39</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>10</u> | <u>40</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>11</u> | <u>41</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>12</u> | <u>42</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>13</u> | <u>43</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>14</u> | <u>44</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>15</u> | <u>45</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>16</u> | <u>46</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>17</u> | <u>47</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>18</u> | <u>48</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>19</u> | <u>49</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>20</u> | <u>50</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>21</u> | <u>51</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>22</u> | <u>52</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>23</u> | <u>53</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>24</u> | <u>54</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>25</u> | <u>55</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>26</u> | <u>56</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>27</u> | <u>57</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>28</u> | <u>58</u> | | | | | |
| | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>29</u> | <u>59</u> | | | | | |

Additional Info (include steam dissipation point)

Observer's Signature

J. Johnson



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 4 of 4

Date: 3-19-12
 Source: Q-ROOF
 Observation Start Time: 1530⁰⁰
 Observation End Time: 1545⁴⁵
 Observer's Position: SPL-
 Distance to source: 225 YDS
 Direction to source: NW

Emissions color: AS NOTED
 Background: SKY
 Sky Conditions: BLU/E
 Wind Speed: 8
 Wind Direction: SW
 Ambient Temp: 78°
 Relative Humidity%: 66%
 Wet Bulb Temp: _____

| Start | End |
|-----------------|-------------|
| <u>AS NOTED</u> | <u>SAME</u> |
| <u>SKY</u> | |
| <u>BLU/E</u> | |
| <u>8</u> | |
| <u>SW</u> | |
| <u>78°</u> | |
| <u>66%</u> | |
| | |

Height of source: 186
 Vertical angle to source: 13°

Plume Type: (Attached) Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|-----------|---|----|----|----|----|----|---|----|----|----|------------------------|
| <u>11</u> | | | | | 0 | 30 | 0 | 0 | 0 | 0 | <u>HEAT 3 RUN 2.</u> |
| | | | | | 1 | 31 | 0 | 0 | 0 | 0 | <u>CONT'D</u> |
| | | | | | 2 | 32 | 0 | 0 | 0 | 0 | |
| | | | | | 3 | 33 | 0 | 0 | 0 | 0 | |
| | | | | | 4 | 34 | 0 | 0 | 0 | 0 | |
| | | | | | 5 | 35 | 0 | 0 | 0 | 0 | |
| | | | | | 6 | 36 | 0 | 0 | 0 | 0 | |
| | | | | | 7 | 37 | 0 | 0 | 0 | 0 | |
| | | | | | 8 | 38 | 0 | 0 | 0 | 0 | |
| | | | | | 9 | 39 | 0 | 0 | 0 | 0 | |
| | | | | | 10 | 40 | 0 | 0 | 0 | 0 | |
| | | | | | 11 | 41 | 0 | 0 | 0 | 0 | |
| | | | | | 12 | 42 | 0 | 0 | 0 | 0 | |
| | | | | | 13 | 43 | 0 | 0 | 0 | 0 | |
| | | | | | 14 | 44 | 0 | 0 | 0 | 0 | |
| | | | | | 15 | 45 | 0 | 0 | 0 | 0 | <u>END OBSERVATION</u> |
| | | | | | 16 | 46 | | | | | |
| | | | | | 17 | 47 | | | | | |
| | | | | | 18 | 48 | | | | | |
| | | | | | 19 | 49 | | | | | |
| | | | | | 20 | 50 | | | | | |
| | | | | | 21 | 51 | | | | | |
| | | | | | 22 | 52 | | | | | |
| | | | | | 23 | 53 | | | | | |
| | | | | | 24 | 54 | | | | | |
| | | | | | 25 | 55 | | | | | |
| | | | | | 26 | 56 | | | | | |
| | | | | | 27 | 57 | | | | | |
| | | | | | 28 | 58 | | | | | |
| | | | | | 29 | 59 | | | | | |

Additional Info (include steam dissipation point)

Observer's Signature

J. Johnson

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

GW-Primary00157**Incident**

| | | | |
|-------------------------------|--|---------------------------------|------------------------|
| Short Description: | Verif - No. 2QBOP Roof Monitor | | |
| Type: | Air Requirement | Status: | Open |
| Reported By: | OCS | Phone: | |
| Date Received: | 3/23/2012 10:00 AM | USS / Transtar Employee? | No |
| Entered By: | Mayella Reyes | End Date: | 3/23/2012 9:43 AM |
| Date Occurred: | 3/23/2012 9:41 AM | Offsite? | No |
| Incident State: | Ended | Location: | No. 2QBOP Roof Monitor |
| Process Unit: | Q-BOP - North | | |
| Description: | (1) exceedance of the PM10 limit at No. 2QBOP Roof monitor. Average opacity reading of 24% from 9:41am - 9:43am. | | |
| Environmental Contact: | Mardanna Soto | Method of Contact: | Text |
| Date Contacted: | 3/23/2012 10:00 AM | CPAR Required? | |
| | | CPAR #: | |

Additional Information

| | | | |
|---|--|------------------------------------|-------|
| Media: | Air | Severity: | High |
| Has the Initial report been confirmed? | Yes | Confirmation Method: | Field |
| Were changes to the initial report required? | No | Outside Impact? | No |
| Reportable? | Yes - Agency Reportable | Deviation (Y/N): | No |
| Permit/Citation Ref/Plan Associated: | | | |
| Additional Comments: | Heat was T42320, card#9812 | | |
| Root Cause Determination: | Flameup apparently due to charging wet scrap into a cold vessel. | | |
| Associated with another Incident? | No | Associated Incident Number? | |
| Health and Safety? | No | Category: | |
| Incident Classification: | | | |
| Initiating Event: | | | |
| Include in Rates and Counts? | Yes | | |

Incident Detail

| | | | |
|---|---------------------|---------------------------------|----------------|
| Incident Sub-Type: | Self Observed Event | Type of air requirement: | Title V Permit |
| Type of deviation/exceedance/regulation: | Internal Monitoring | # COMS or # CEMS: | |
| Cause: | Under Investigation | | |
| Control & Counter Measure: | Refer to CA section | | |

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

Materials

No Data

Regulatory Notifications

No Data

Incident Investigation List

No Data

Incident Investigation Detail

No Data

Corrective Actions List

| Corrective Action | Status |
|--|-----------|
| P - use scrap E box when charging a cold furnace during wet conditions | Completed |
| c-manage e box at BOP | Completed |

Corrective Actions Detail**Corrective Action: P - use scrap E box when charging a cold furnace during wet conditions**

Author: LASH, JAMES

Author Date: 3/23/2012

CAI #:

Notes:

Manager: 11969

Status: Completed

Priority:

Origin Cause:

Proposed Corrective Action:

Proposed Completion Date: 3/26/2012

Revised Completion Date:

Site Response:

Assigned To:

Externally Controlled:

Review on Completion:

Actual Corrective Action:

Actual Completion Date: Mar 26, 2012 12:00:00 AM

Verified By:

Date Verified:

Corrective Action: c-manage e box at BOP

Author: NICKERSON, IAN

Author Date: 4/3/2012

CAI #:

Notes: Although a BOP activity, this action item is being tracked under the QBOP Incident due to its similar nature.

Manager: 12113

Status: Completed

Priority:

Origin Cause:

ESS0053B

**United States Steel Corporation
GW - Primary - Steel Producing
EIRS Incident Screen Print**

Proposed Corrective Action: Ensure BOP emergency scrap box is kept dry with either a tarp, moving the box inside, or putting it under a shelter.
Proposed Completion Date: 4/30/2012
Revised Completion Date: 6/8/2012
Site Response: E Scrap box has been moved under roof.
Assigned To:
Externally Controlled:
Review on Completion:
Actual Corrective Action:
Actual Completion Date: May 30, 2012 12:00:00 AM
Verified By:
Date Verified:

Root Cause

No Data

Reviewers/Approvers

No Data

Attachments

No Data

Witness Statements

No Data

Tasks

No Data

Lessons Learned

No Data

Q-BOP EAST CCS

Run # 1

Heat # 1



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 1 of 3

Date: 3/23/12
 Source: Q Bop Root mount
 Observation Start Time: 0827
 Observation End Time: 0859
 Observer's Position: SP6
 Distance to source: 225 yds
 Direction to source: NW
 Height of source: 10'
 Vertical angle to source: 13'

Emissions color:
 Background:
 Sky Conditions:
 Wind Speed:
 Wind Direction:
 Ambient Temp:
 Relative Humidity%:
 Wet Bulb Temp:

| Start | End |
|--------------------|-------------|
| <u>As Noted</u> | <u>SAME</u> |
| <u>sky</u> | |
| <u>O.C. / Grey</u> | |
| <u>4</u> | |
| <u>E</u> | |
| <u>62°</u> | |
| <u>88%</u> | |
| <u>N/A</u> | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | 0 | 15 | 30 | 45 | Comments |
|----------------------|---|----|----|----|----|----|----|----|----|----------|
| | | | | | 0 | 30 | 0 | 0 | 0 | |
| | | | | | 1 | 31 | 0 | 0 | 0 | |
| | | | | | 2 | 32 | 0 | 0 | 0 | |
| | | | | | 3 | 33 | 0 | 0 | 0 | |
| | | | | | 4 | 34 | 0 | 0 | 0 | |
| | | | | | 5 | 35 | 0 | 0 | 0 | |
| | | | | | 6 | 36 | 0 | 0 | 0 | |
| | | | | | 7 | 37 | 0 | 0 | 0 | |
| | | | | | 8 | 38 | 0 | 0 | 0 | |
| | | | | | 9 | 39 | 0 | 0 | 0 | |
| | | | | | 10 | 40 | 0 | 0 | 0 | |
| | | | | | 11 | 41 | 0 | 0 | 0 | |
| | | | | | 12 | 42 | 0 | 0 | 0 | |
| | | | | | 13 | 43 | 0 | 0 | 0 | |
| | | | | | 14 | 44 | 0 | 0 | 0 | |
| | | | | | 15 | 45 | 0 | 0 | 0 | |
| | | | | | 16 | 46 | 0 | 0 | 0 | |
| | | | | | 17 | 47 | 0 | 0 | 0 | |
| | | | | | 18 | 48 | 0 | 0 | 0 | |
| | | | | | 19 | 49 | 0 | 0 | 0 | |
| | | | | | 20 | 50 | 0 | 0 | 0 | |
| | | | | | 21 | 51 | 0 | 0 | 0 | |
| | | | | | 22 | 52 | 0 | 0 | 0 | |
| | | | | | 23 | 53 | 0 | 0 | 0 | |
| | | | | | 24 | 54 | 0 | 0 | 0 | |
| | | | | | 25 | 55 | 0 | 0 | 0 | |
| | | | | | 26 | 56 | 0 | 0 | 0 | |
| Stack Run 1 / Heat 1 | 0 | 0 | 0 | 0 | 27 | 57 | 0 | 0 | 0 | |
| East CCS | 0 | 0 | 0 | 0 | 28 | 58 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 29 | 59 | 0 | 0 | 0 | |

Additional Info (include steam dissipation point)

Observer's Signature



OCS Environmental, Inc.

U.S. Steel Gary Works
Emissions Inspection Summary

Date: 3 / 23 / 12Start Time: 0827 AM / PMEnd Time: 1012 AM / PM

No. 2 Precarbon ESP

BOP

Roof Monitor

Gas Cleaners

QBOPRoof Monitor

Gas Cleaners

Blast Furnace 4 6 8 14

Blast Furnace Top 4 6 8 14

The following events or operations contributed to significant emissions:

| Time | Heat/Cast Number | Operation | Comments |
|---|------------------|------------------|---|
| 0841 ⁰⁵ - 0943 ¹⁵ | T 42320 | HOT METAL CHANGE | ORANGE / BROWN TOTAL - 285 HIGHEST - 30 |
| | | | |
| | | | |
| | | | |
| | | | |



OCS Environmental, Inc.
Method 9 VE Inspection Form

Page 2 of 3

Date: 3/23/12
 Source: Q. Bar Ref. met.
 Observation Start Time: 0900
 Observation End Time: 0959
 Observer's Position: SP6
 Distance to source: 225 yds
 Direction to source: NW
 Height of source: 186'
 Vertical angle to source: 13°

Emissions color:

Background:

Sky Conditions:

Wind Speed:

Wind Direction:

Ambient Temp:

Relative Humidity%:

Wet Bulb Temp:

| Start | End |
|-----------|------|
| As Noted | Same |
| sky | |
| O.C. Gray | |
| 4 | |
| E | |
| 62° | |
| 88% | |
| N/A | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | | 0 | 15 | 30 | 45 | Comments |
|-------------|---|----|----|----|----|----|----|----|----|----|----------------------|
| | 0 | 0 | 0 | 0 | 0 | 30 | X | X | X | X | |
| | 0 | 0 | 0 | 0 | 1 | 31 | 0 | 0 | 0 | 0 | Heat #2 Rev #1 |
| | 0 | 0 | 0 | 0 | 2 | 32 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 3 | 33 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 4 | 34 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 5 | 35 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 6 | 36 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 7 | 37 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 8 | 38 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 9 | 39 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 10 | 40 | 0 | 0 | 0 | 0 | |
| END HEAT #1 | 0 | 0 | 0 | 0 | 11 | 41 | 80 | 70 | 60 | 50 | Brown / Not matn. -T |
| Run 1 | | | | | 12 | 42 | 20 | 5 | 0 | 0 | 285 Total |
| | | | | | 13 | 43 | 0 | 0 | 0 | 0 | |
| | | | | | 14 | 44 | 0 | 0 | 0 | 0 | |
| | | | | | 15 | 45 | 0 | 0 | 0 | 0 | |
| | | | | | 16 | 46 | 0 | 0 | 0 | 0 | |
| | | | | | 17 | 47 | 0 | 0 | 0 | 0 | |
| | | | | | 18 | 48 | 0 | 0 | 0 | 0 | |
| | | | | | 19 | 49 | 0 | 0 | 0 | 0 | |
| | | | | | 20 | 50 | 0 | 0 | 0 | 0 | |
| | | | | | 21 | 51 | 0 | 0 | 0 | 0 | |
| | | | | | 22 | 52 | 0 | 0 | 0 | 0 | |
| | | | | | 23 | 53 | 0 | 0 | 0 | 0 | |
| | | | | | 24 | 54 | 0 | 0 | 0 | 0 | |
| | | | | | 25 | 55 | 0 | 0 | 0 | 0 | |
| | | | | | 26 | 56 | 0 | 0 | 0 | 0 | |
| | | | | | 27 | 57 | 0 | 0 | 0 | 0 | |
| | | | | | 28 | 58 | 0 | 0 | 0 | 0 | |
| | | | | | 29 | 59 | 0 | 0 | 0 | 0 | |

Additional info (include steam dissipation point)

Observer's Signature



OCS Environmental, Inc.
Method 9-VE Inspection Form

Page 3 of 3

| | | | | |
|---------------------------|--------------------------|---------------------|--------------------|---------------|
| Date: | <u>3/23/12</u> | Emissions color: | Start | End |
| Source: | <u>Q. Bop Roof Mont.</u> | Background: | <u>As Noted</u> | <u>Stains</u> |
| Observation Start Time: | <u>1000</u> | Sky Conditions: | <u>SKY</u> | |
| Observation End Time: | <u>1017h</u> | Wind Speed: | <u>0.6 / 6 mph</u> | |
| Observer's Position: | <u>SP6</u> | Wind Direction: | <u>E</u> | |
| Distance to source: | <u>225 yds</u> | Ambient Temp: | <u>62°</u> | |
| Direction to source: | <u>NW</u> | Relative Humidity%: | <u>88%</u> | |
| Height of source: | <u>186'</u> | Wet Bulb Temp: | <u>N/A</u> | |
| Vertical angle to source: | <u>13°</u> | | | |

Plume Type: Attached Detached None

| Comments | 0 | 15 | 30 | 45 | | 0 | 15 | 30 | 45 | Comments |
|----------|---|----|----|----|----|----|----|----|----|----------|
| | 0 | 0 | 0 | 0 | 0 | 30 | | | | |
| | 0 | 0 | 0 | 0 | 1 | 31 | | | | |
| | 0 | 0 | 0 | 0 | 2 | 32 | | | | |
| | 0 | 0 | 0 | 0 | 3 | 33 | | | | |
| | 0 | 0 | 0 | 0 | 4 | 34 | | | | |
| | 0 | 0 | 0 | 0 | 5 | 35 | | | | |
| | 0 | 0 | 0 | 0 | 6 | 36 | | | | |
| | 0 | 0 | 0 | 0 | 7 | 37 | | | | |
| | 0 | 0 | 0 | 0 | 8 | 38 | | | | |
| | 0 | 0 | 0 | 0 | 9 | 39 | | | | |
| | 0 | 0 | 0 | 0 | 10 | 40 | | | | |
| Abort 1 | 0 | 0 | 0 | 0 | 11 | 41 | | | | |
| | 0 | 0 | 0 | 0 | 12 | 42 | | | | |
| | | | | | 13 | 43 | | | | |
| | | | | | 14 | 44 | | | | |
| | | | | | 15 | 45 | | | | |
| | | | | | 16 | 46 | | | | |
| | | | | | 17 | 47 | | | | |
| | | | | | 18 | 48 | | | | |
| | | | | | 19 | 49 | | | | |
| | | | | | 20 | 50 | | | | |
| | | | | | 21 | 51 | | | | |
| | | | | | 22 | 52 | | | | |
| | | | | | 23 | 53 | | | | |
| | | | | | 24 | 54 | | | | |
| | | | | | 25 | 55 | | | | |
| | | | | | 26 | 56 | | | | |
| | | | | | 27 | 57 | | | | |
| | | | | | 28 | 58 | | | | |
| | | | | | 29 | 59 | | | | |

Additional info (include steam dissipation point)

Observer's Signature

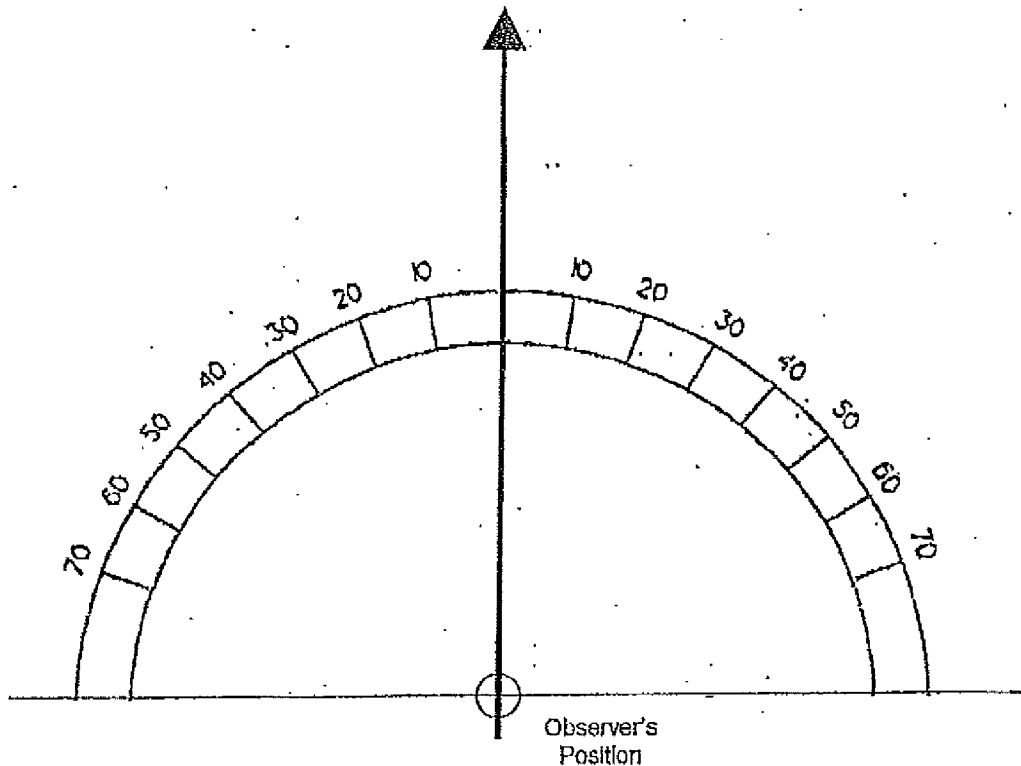
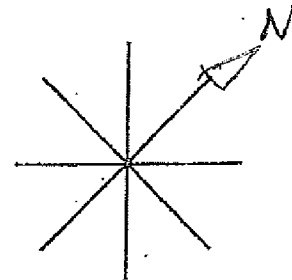
Rel. M. J.



OCS Environmental, Inc.
Method 9 Source Layout Sketch

Date: 3 / 23 / 12Observer Name: R. MackeyBegin Time: 0827Time End: 1612

No Sun Visible Times

0827
0857
0927
0957Signature: R. Mackey

